

# 01

## 開發環境與驅 動程式安裝

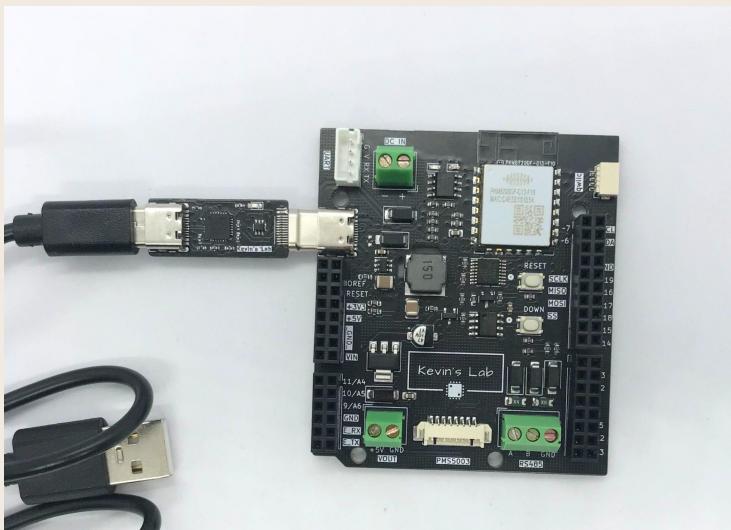
# 開發環境與驅動程式安裝

上傳工具



# 開發環境與驅動程式安裝

上傳工具



# 開發環境與驅動程式安裝

將USB上傳工具接入Type-C及電腦

如果在裝置管理員出現驚嘆號，

表示需要安裝驅動程式

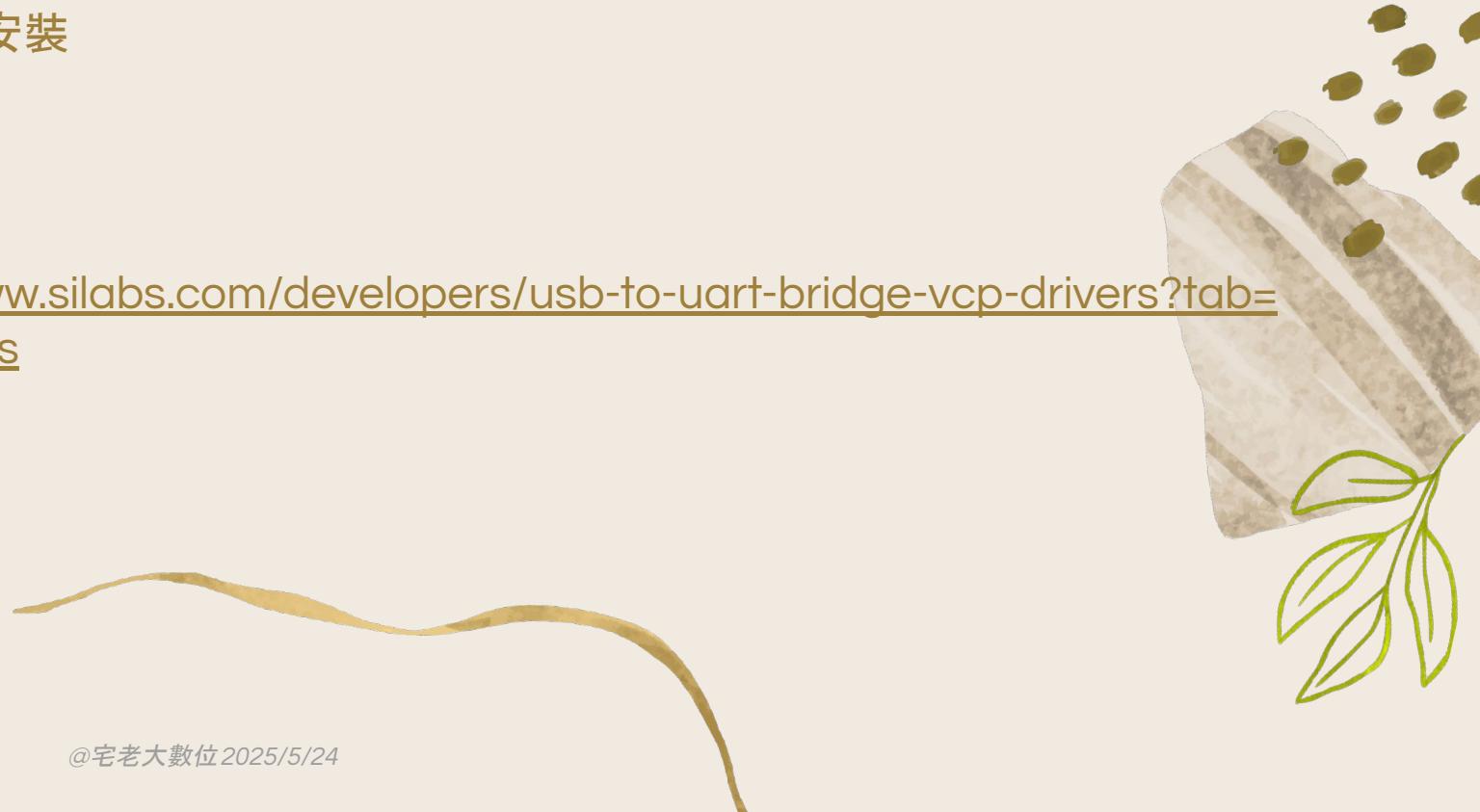


# 開發環境與驅動程式安裝

## 驅動程式安裝

開啟網頁:

<https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers?tab=downloads>



# 開發環境與驅動程式安裝

## 驅動程式安裝

Windows 選擇

CP210x Windows Drivers

Mac 選擇

CP210x VCP MAC OSX Driver

### Software Downloads

Software (10)

Software · 10

CP210x Universal Windows Driver	v11.3.0 6/24/2023
CP210x VCP Mac OSX Driver	v6.0.2 10/27/2021
CP210x Windows Drivers	v6.7.6 9/4/2020
CP210x Windows Drivers with Serial Enumerator	v6.7.6 9/4/2020
CP210x_5x_AppNote_Archive	9/4/2020
CP210x_VCP_Win2K	9/4/2020
Linux 2.6.x VCP Revision History	9/4/2020
Linux 3.x.x/4.x.x/5.x.x VCP Driver	v3.x.x/4.x.x/5.x.x 1/29/2021
VCP Driver for WinCE60	v2.1 9/4/2020
VCP Drivers for WinCE50	v2.1 9/4/2020

# 開發環境與驅動程式安裝

下載後，並解壓縮。找到

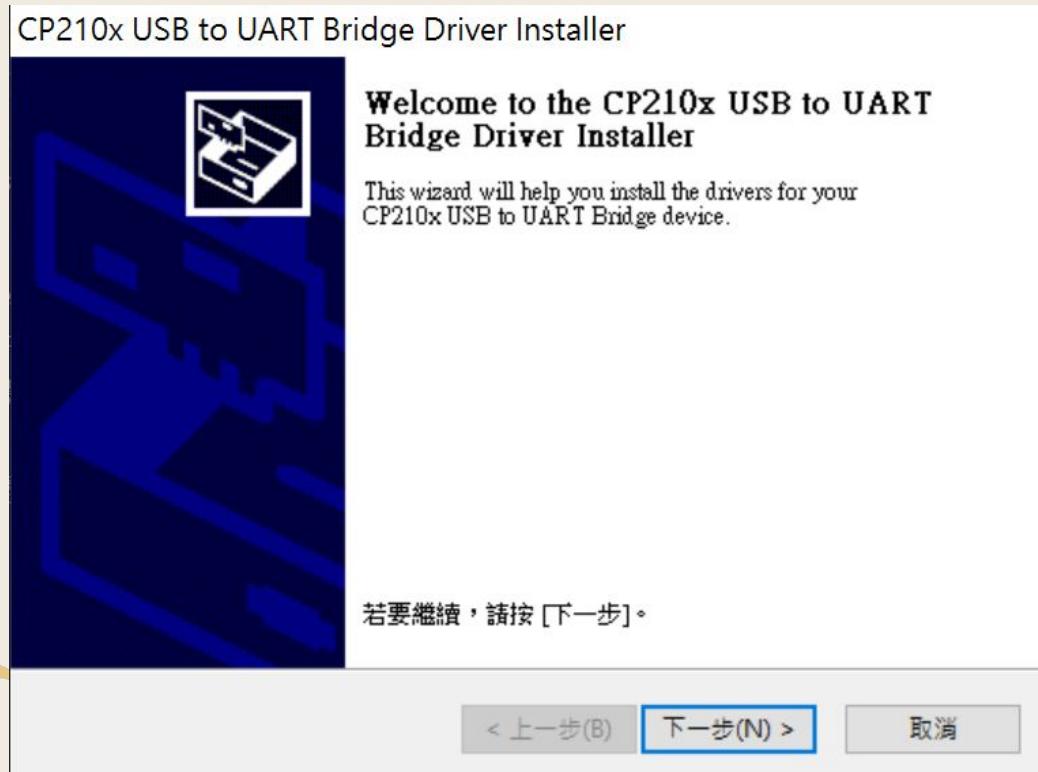
CP210xVCPIinstaller\_x64.exe

並執行它



# 開發環境與驅動程式安裝

按下一步繼續，  
按指示安裝。



# 開發環境與驅動程式安裝

## 安裝 Arduino IDE

### 下載點

[arduino.cc/en/software](https://arduino.cc/en/software)



The screenshot shows the Arduino IDE 2.1.0 download page. At the top left is the Arduino logo (an infinity symbol with a minus and plus sign). To its right is the text "Arduino IDE 2.1.0". Below the logo is a brief description: "The new major release of the Arduino IDE is faster and even more powerful! In addition to a more modern editor and a more responsive interface it features autocompletion, code navigation, and even a live debugger." Further down, there's a link: "For more details, please refer to the [Arduino IDE 2.0 documentation](#)". At the bottom of this section is the text: "Nightly builds with the latest bugfixes are available through the section below." On the right side of the page, under "DOWNLOAD OPTIONS", there are links for Windows (Win 10 and newer, 64 bits; MSI installer; ZIP file), Linux (AppImage 64 bits (X86-64); ZIP file 64 bits (X86-64)), and macOS (Intel, 10.14: "Mojave" or newer, 64 bits; Apple Silicon, 11: "Big Sur" or newer, 64 bits). A "Release Notes" link is also present.

# 開發環境與驅動程式安裝

Arduino 設定

複製以下連結

[https://github.com/ambiot/ambd\\_arduino/raw/master/Arduino\\_package/package\\_realtek\\_amebad\\_index.json](https://github.com/ambiot/ambd_arduino/raw/master/Arduino_package/package_realtek_amebad_index.json)

開啟 File / preferences

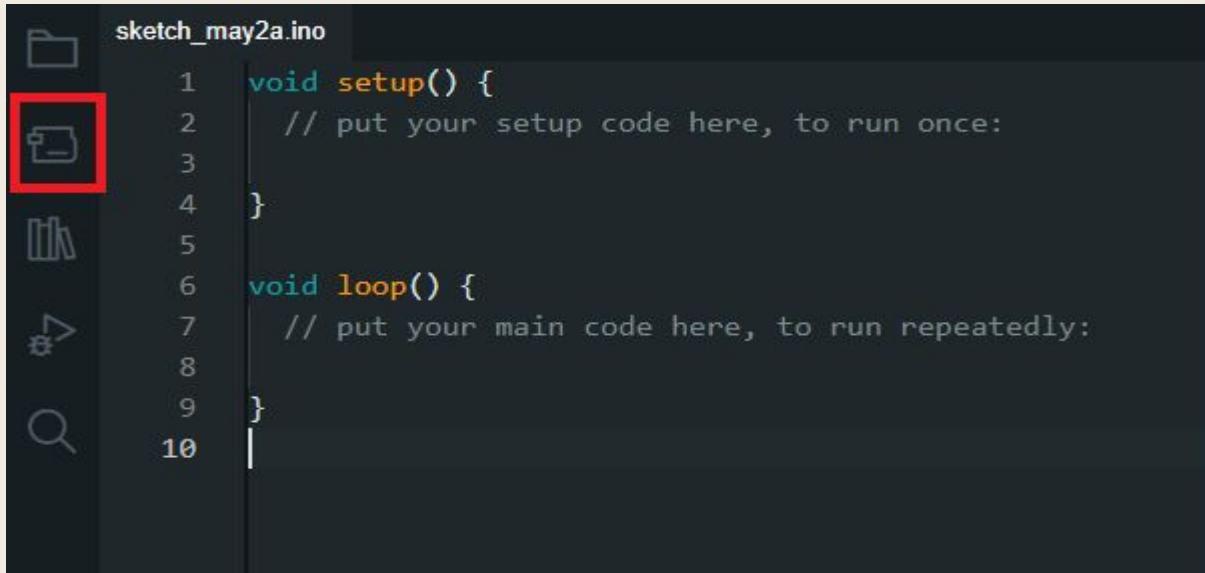
在 Additional boards manager URLs 的欄位 貼上 上述網址, 點 OK 結束設定



# 開發環境與驅動程式安裝

- Arduino 設定

點取左側 第二個圖示， Boards Manager



The image shows a screenshot of the Arduino IDE interface. On the left, there is a sidebar with several icons: a folder, a file (highlighted with a red box), a book, a gear, and a magnifying glass. The main area displays a code editor with the following content:

```
sketch_may2a.ino
1 void setup() {
2     // put your setup code here, to run once:
3
4 }
5
6 void loop() {
7     // put your main code here, to run repeatedly:
8
9 }
10
```

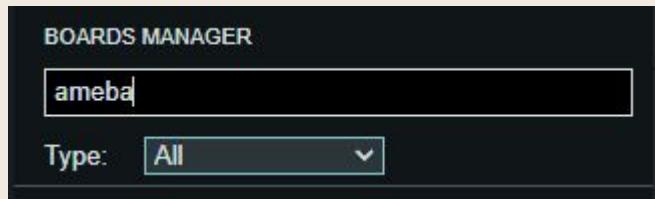
The code is written in C++ and defines a sketch named "sketch\_may2a.ino". It contains two functions: "setup()" and "loop()", each with its own block of comments.



# 開發環境與驅動程式安裝

- Arduino 設定

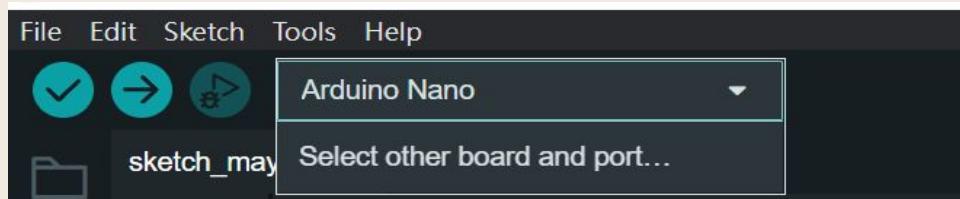
輸入 ameba



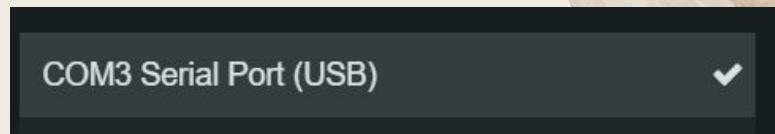
# 開發環境與驅動程式安裝

- Arduino 設定

透過 USB 連接 開發板



選擇 Select other board and port



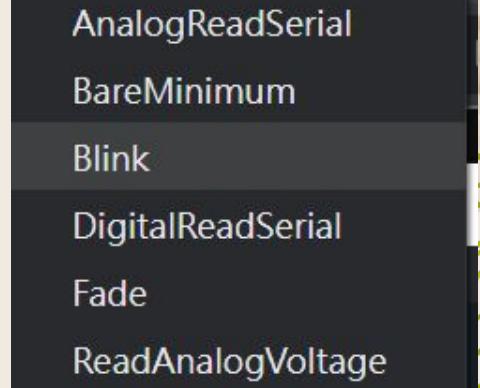
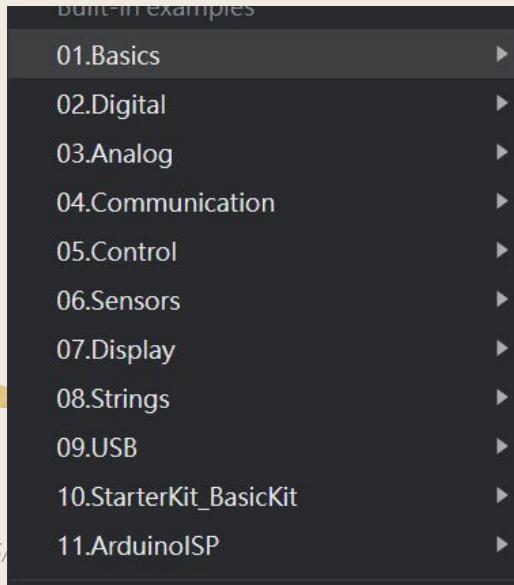
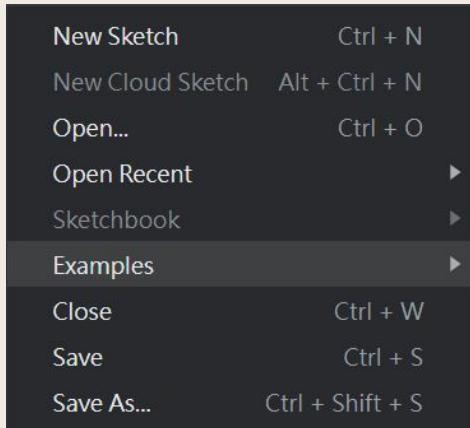
Board 選擇 Datalogger Series(RTL8720DF)

# 開發環境與驅動程式安裝

- Arduino 設定

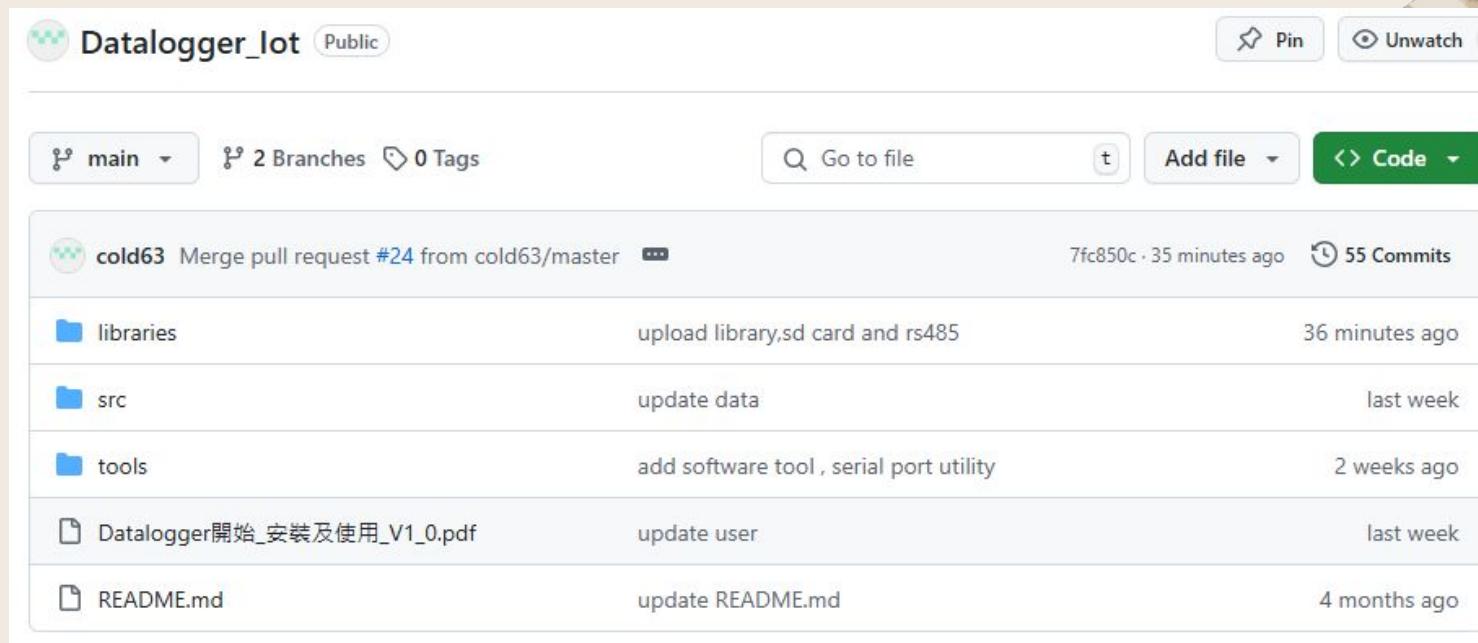
## 第一個程式

打開 File / Examples / 01.Basics / Blink



# 開發環境與驅動程式安裝

- 範例程式及資料 (操作手冊及程式庫)
  - [https://github.com/cold63/Datalogger\\_Iot/tree/main](https://github.com/cold63/Datalogger_Iot/tree/main)



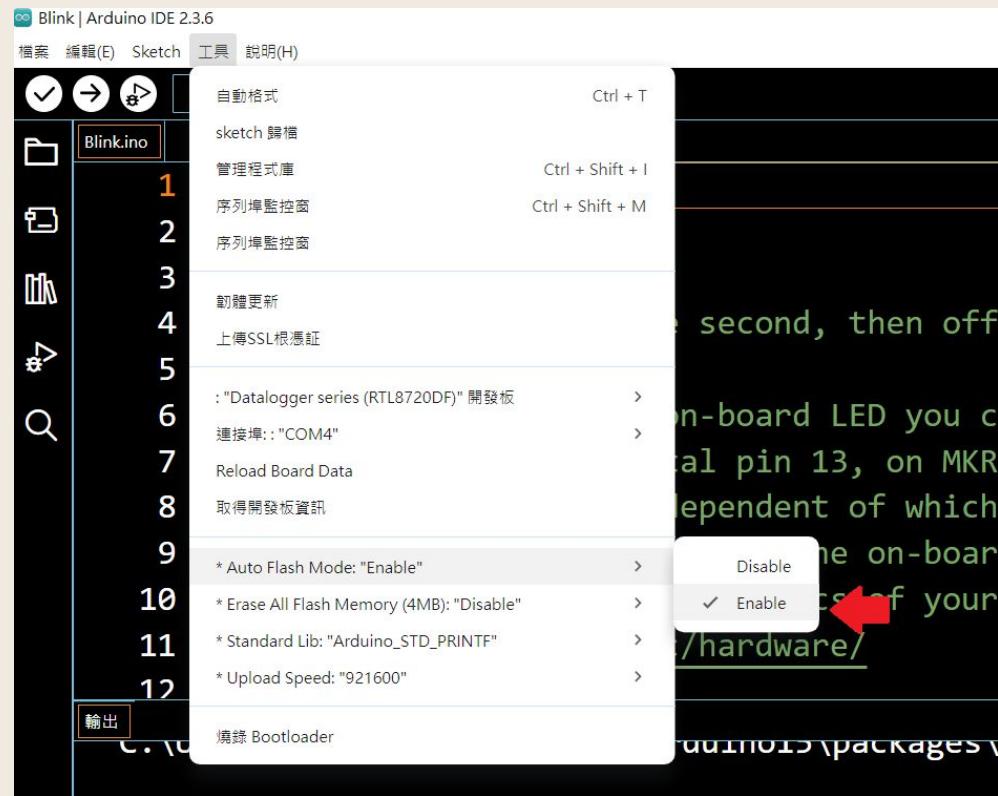
The screenshot shows the GitHub repository page for 'Datalogger\_Iot'. The repository is public and has 2 branches and 0 tags. The commit history is displayed below, showing the following changes:

File / Action	Description	Time
libraries	upload library, sd card and rs485	36 minutes ago
src	update data	last week
tools	add software tool , serial port utility	2 weeks ago
Datalogger開始_安裝及使用_V1_0.pdf	update user	last week
README.md	update README.md	4 months ago

# 開發環境與驅動程式安裝

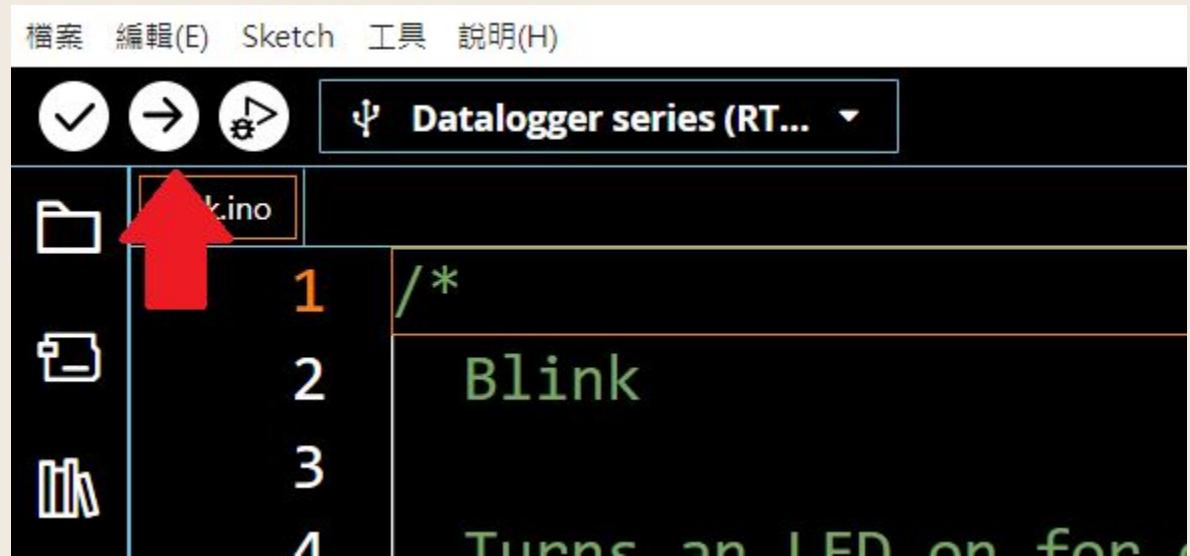
工具 / Auto Flash Mode

選擇 Enable



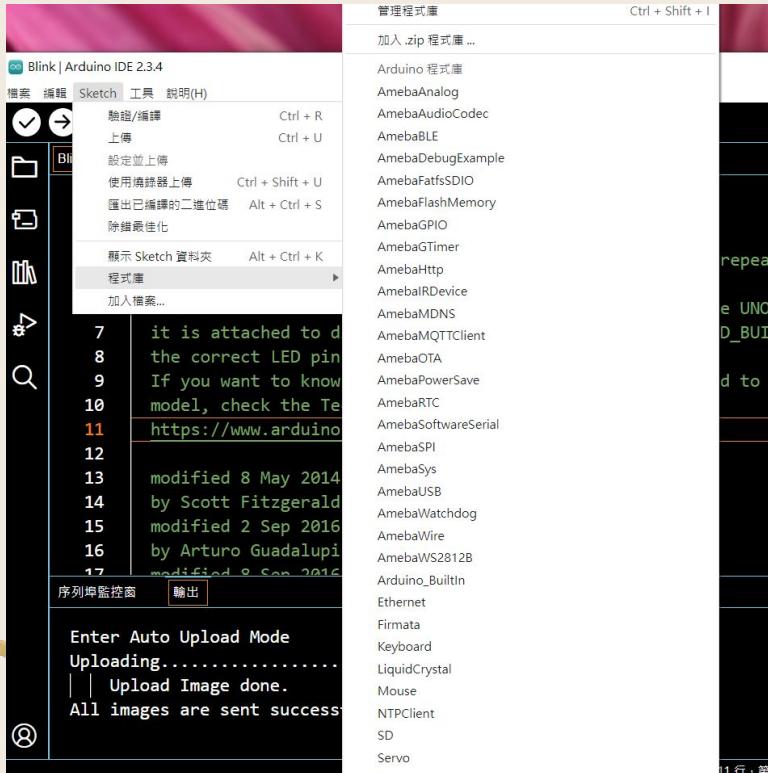
# 開發環境與驅動程式安裝

執行上傳



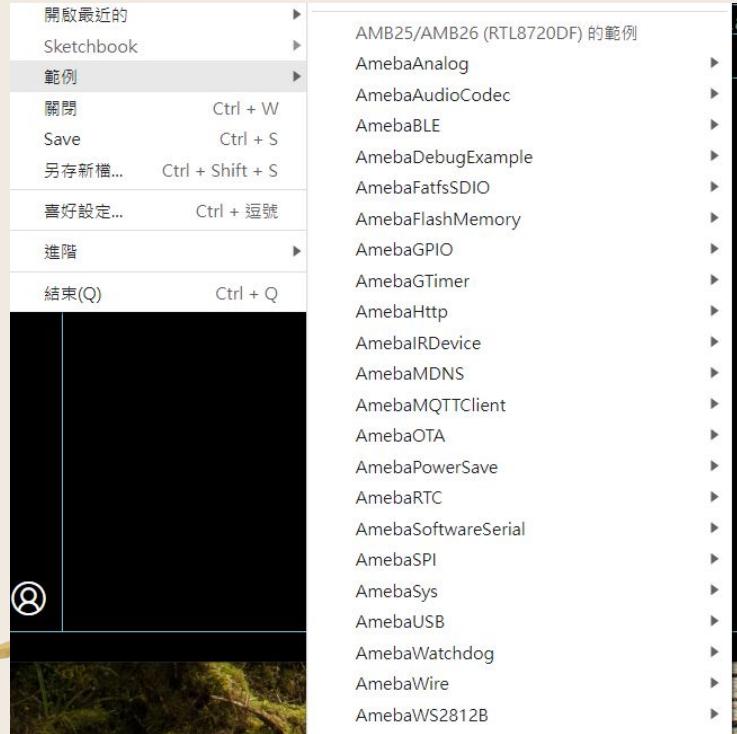
# 開發環境與驅動程式安裝

## ● 安裝 Zip 程式庫的方法



# 開發環境與驅動程式安裝

Realtek 提供的 Arduino 範例



# 開發環境與驅動程式安裝

## 常用程式庫安裝

- RS-485
  - ModbusMaster by Doc Walker (Arduino IDE 安裝)
  - Modbus-Master-Slave-for-Arduino (下載安裝)
- SD Card
  - SdFat (下載安裝)
- Oled
  - u8g2 (Arduino IDE 安裝)

